

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of constructing a representation of the geographical distribution of traffic for a cellular radio network, the method comprising the steps of:

dividing each cell of said cellular network into a set of areas using information on handovers boundaries obtained from said cellular network;

determining a traffic value for each of said areas; ~~and~~

determining a representation of the geographical distribution of the traffic from said traffic values; ~~and,~~

outputting the determined representation,

wherein the traffic value of an area depends on an outgoing handover probability (α_1, α_2) from said area to a neighboring cell.

2. (canceled).

3. (previously presented): A method according to claim 1, wherein said handover probabilities are computed conjointly with said traffic values by a constraint optimization method.

4. (original): A method according to claim 1, wherein the step of dividing each cell is made up of the following substeps:

acquiring incoming handover boundaries from best server maps provided by a management system, and

computing outgoing handover boundaries from said incoming handover boundaries, said outgoing handover boundaries forming the boundaries of said areas.

5. (previously presented): A method according to claim 1, wherein the following constraint is satisfied for each cell: addition of all the traffic values (λ_k) of the areas (A_k) comprised in a cell (i) is equal to the traffic value of the cell (i).

6. (previously presented): A method according to claim 1, wherein a distinction is made between two types of areas contained in a cell C_i :

areas near a cell C_i , for which the probability a_1 that a call will be subject to an outgoing handover is relatively high,

other areas of the cell C_i , for which the probability a_2 that a call will be subject to an outgoing handover is relatively low.

7. (currently amended): A computer planning device for constructing a representation of the geographical distribution of traffic for a cellular radio network, the device comprising:

a dividing module dividing each cell of said cellular network into a set of areas using information on handovers boundaries obtained from said cellular network;

a first determining module determining a traffic value for each of said areas; ~~and~~
a second determining module determining a representation of the geographical
distribution of the traffic from said traffic values; ~~and~~
an outputting module outputting the determined representation to a management unit,
wherein the traffic value of an area depends on an outgoing handover probability (α_1, α_2)
from said area to a neighboring cell.

8. (new): The method according to claim 1, wherein said outputting comprises outputting
the determined representation to a management unit to generate an alarm or to take corrective
measures when needed.

9. (new): The computer planning device according to claim 7, wherein said outputting
module outputs the determined representation to a management unit to generate an alarm or to
take corrective measures when needed.

10. (new): A mobile telecommunications network split into a plurality of cells, the
network comprising:

a plurality of base stations, wherein each of the base stations are allocated to a respective
cell within the plurality of cells;

a management unit for managing the network;

a planning tool for constructing a representation of the geographical distribution of traffic
for a cellular radio network, wherein the planning tool divides each cell of said cellular network

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into a set of areas using information on handovers boundaries obtained from said cellular network, determines a traffic value for each of said areas, and determines a representation of the geographical distribution of the traffic from said traffic values; and

a storage unit storing the determined representation for determining whether corrective measures are needed with respect to allocation of the plurality of base stations to respective cells,

wherein the traffic value of an area depends on an outgoing handover probability (α_1, α_2) from said area to a neighboring cell.